ABSTRACT OF THE DISCLOSURE

A vehicle control system is provided for detecting the approach of another vehicle to perform a collision avoidance action. The system comprises capturing means for capturing an external image from the primary vehicle; template memory means for storing templates for detecting the approach of the another vehicle; template update means for updating the templates when a brake pedal is pressed by a driver; recognizing means for comparing the external image with the template and calculating an evaluation value to determine whether the another vehicle approaches the primary vehicle based on the result of said comparing; and instruction means for instructing the primary vehicle to perform the collision avoidance action when said evaluation value exceeds a threshold value. When an image similar to the template is captured and the driver does not perform a collision avoidance action such as releasing an accelerator or pressing a brake pedal, a brake system throttle valve is forcibly closed. Thus, the accelerator becomes out of control and sufficient braking force is provided even if harsh braking is performed by the driver.